

SOT-23 Plastic-Encapsulate Switching Diode

Features

- 6nS; Fast Switching Device (TRR <6nS)
- 225mW; Power Dissipation of 225mW
- High Stability and High Reliability
- Low reverse leakage



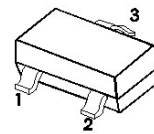
Marking:

SOT-23

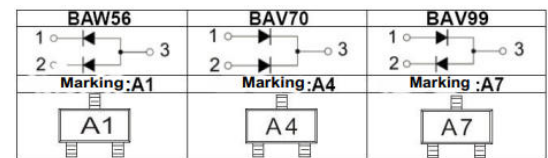
Mechanical Data

- SOT-23 Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting Position: Any

Pin definition



Equivalent circuit



Maximum Ratings & Electrical Characteristics (T_A=25°C unless otherwise noted)

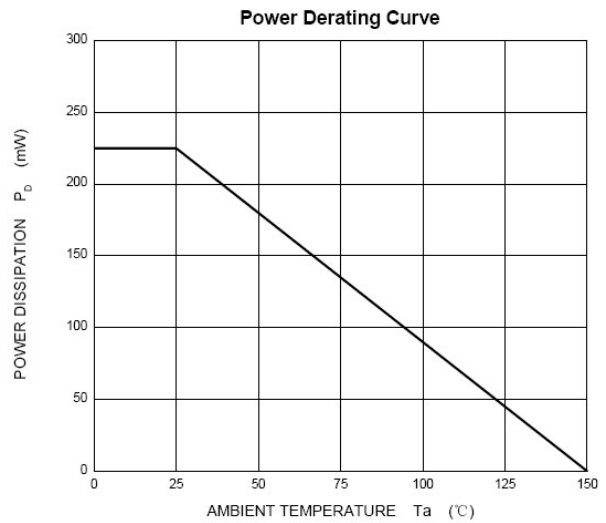
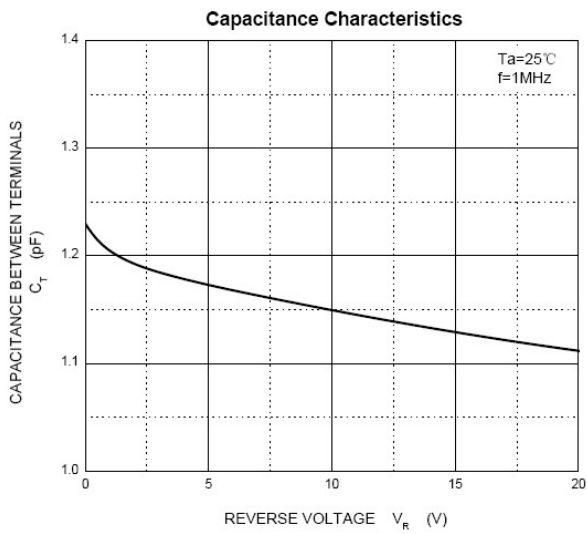
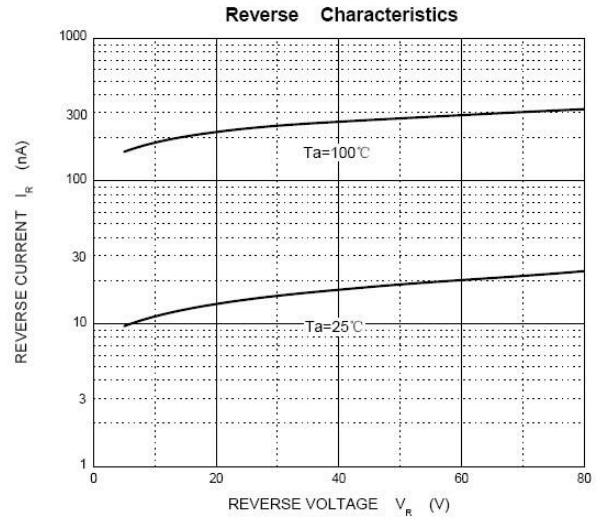
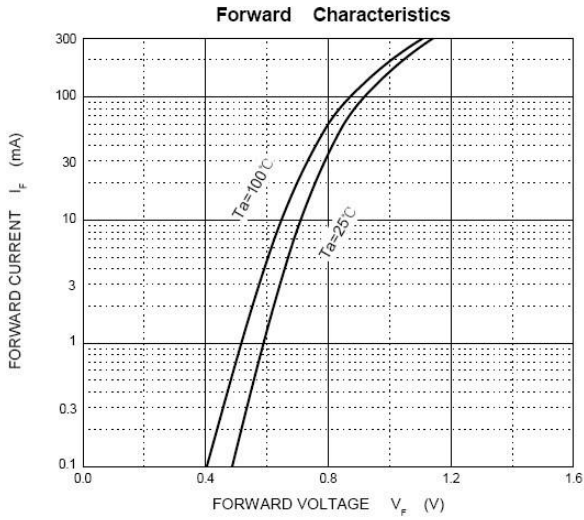
Parameter	Symbol	Value	Unit
Reverse Voltage	V _R	70	V
Power Dissipation	P _D	225	mW
Operating junction temperature	T _J	150	°C
Storage temperature range	T _S	-65-+150	°C
Peak Forward Surge Current @t _p =1ms; T _A =25°C	I _{FSM}	2.0	A
Non-repetitive Peak Forward Current	I _{FM}	400	mA
Average Rectified Current	I _O	200	mA
Typical thermal resistance	R _{θJA}	500	°C/W

Electrical Specifications (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Limits		Unit
			Min	Max	
Reverse Voltage	V _{BR}	I _B =100uA	70		V
Reverse Leakage Current	I _R	V _R =70V		2.5	uA
Forward Voltage	V _F	I _F =1mA		0.715	V
		I _F =10mA		0.855	
		I _F =50mA		1.00	
		I _F =150mA		1.25	
Reverse Recovery Time	T _{RR}	I _F = I _R =10mA, R _L =100Ω I _{RR} =0.1xI _R		6	nS
Capacitance	C _T	V _R =0V, f=1MHZ		1.5	pF

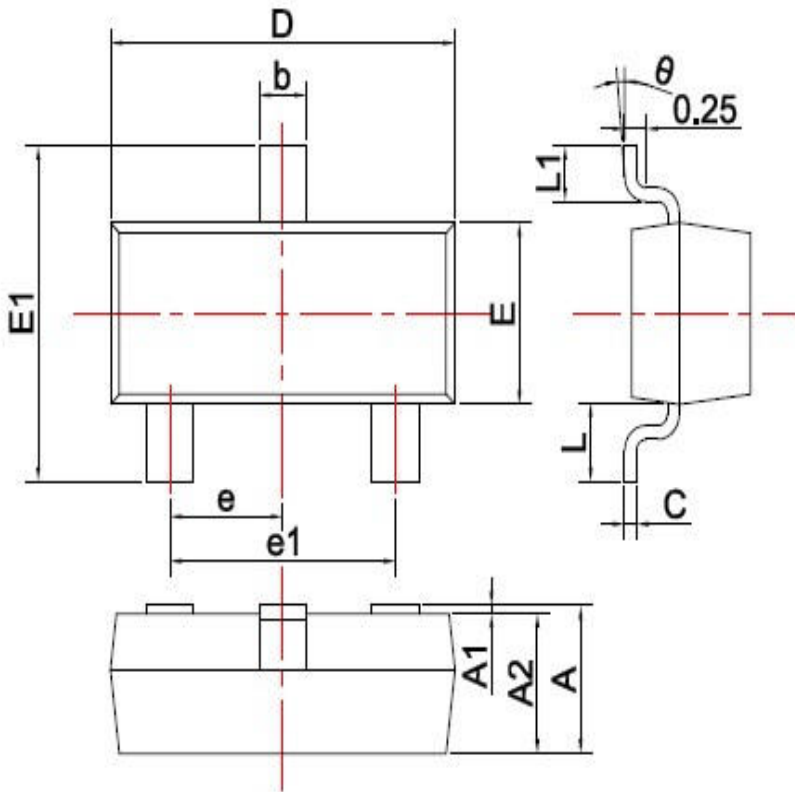
Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)



Package Outline Dimensions

millimeters



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2017.02.17	First issue

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